IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) A system, comprising:
   - at least one source designed for the generation of at least one emission,
   - at least six devices for the measurement of a speed of each respective device in at least one spatial direction, ~~which are~~ the at least six devices being arranged in the system in different spatial directions for the measurement of a speed and of a rotation of the system ~~in different spatial directions~~, wherein each of the at least six devices ~~(1; 2; 3; 4)~~ exhibits at least two paths, on which, respectively, at least one part of the at least one emission generated by the at least one source propagates with a respective known wavelength and a respective known propagation speed, wherein the paths are formed in such a way that a translatory movement of ~~the individual~~ each respective device causes a phase displacement between the emission parts propagated on the at least two paths of the respective device, and
   - evaluation means designed for the detection of emission parts which leave the respective at least two paths of the devices, and for the determination of the speed of each ~~of the~~respective device ~~devices~~ in at least one spatial direction, respectively, by the evaluation of a change in the phase displacement between the detected emission parts in comparison with a phase displacement with the respective device at rest,

   wherein the system is designed in such a way that a change in the phase displacement of the emission parts detected by the evaluation means for

respectively one of the devices due to a rotational movement of this device is prevented or compensated for.

2. (currently amended) The system according to claim 1, wherein the at least two paths of ~~a~~ the respective device exhibit different materials or different combinations of materials.

3. (currently amended) The system according to claim 2, wherein the at least two paths ~~(21, 22)~~ of ~~a~~ the respective device ~~(2)~~ exhibit different geometric lengths.

4. (currently amended) The system according to claim 3, wherein, in order to prevent a change in the phase displacement between the emission parts detected by the evaluation means due to a rotational movement of ~~a~~ each respective device, each of the at least two paths of the respective device exhibits, outside an imaginary straight line, path parts of essentially equal size on opposite sides of this straight line.

5. (currently amended) The system according to claim 3, further comprising detection means designed for the detection of a rotational movement of ~~a~~ each respective device, wherein the evaluation means are designed for the compensation of a change incurred by a rotational movement on the at least two paths of the respective device in the phase displacement between detected emission parts on the basis of information from the detection means.

6. (previously presented) The system according to claim 5, wherein the at least two paths of the respective device are designed in such a way that they exhibit at least one common path section, which is run through in opposite directions by the emission parts fed into the at least two paths .

7. (currently amended) The system according to claim 6, wherein the common path section is designed in such a way that it exhibits a path part which is run through by one of the emission parts essentially in the direction of measurement of ~~the~~ each respective device and a path part which is run through by this emission part essentially in the opposite direction, wherein the two path parts, with the respective device at rest, exhibit a different physical length.

8. (previously presented) The system according to claim 7, further comprising an acceleration sensor designed for creating a reference to the local gravity normal.

9. (previously presented) The system according to claim 8, wherein the at least six devices are arranged on the six faces of a cube, wherein the devices exhibit on adjacent faces measurement axes aligned at right angles to one another, and wherein the devices exhibit on mutually opposing faces measurement axes aligned opposite to one another.

10. (currently amended) A method for the measurement of a speed and a rotation of a system, wherein the method comprises for each of six devices of the system, arranged in different spatial directions:

- ~~the generation~~generating ~~of~~ at least one emission,
- ~~the transfer~~transferring ~~of~~ respectively at least one part of the at least one emission on at least two paths with a respective known wavelength and a respective known propagation speed, wherein a translatory movement of the device causes a phase displacement between the respectively at least one part of the at least one emission ~~parts~~ propagating on the at least two paths;

- ~~the detection of~~detecting the at least one part of the at least one emission ~~parts~~ leaving the at least two paths, and
- ~~the determination of~~determining the speed of the device in at least one spatial direction by the evaluation of a change in the phase displacement between the detected at least one part of the at least one emission ~~parts~~ in comparison with a phase displacement with the device at rest, wherein a change in the phase displacement of the at least one part of the at least one emission ~~parts~~ due to a rotational movement of the device is prevented or compensated for,

  wherein the method further comprises a determination of the speed and the rotation of the system from the speeds ~~detected~~ determined for each of the six ~~respective device~~ devices.

11. (previously presented) The method according to claim 10, wherein the at least six devices are arranged on the six faces of a cube, wherein the devices on adjacent faces determine the speed in spatial directions at right angles to one another, and wherein the devices on opposite faces determine the speed in spatial directions opposed to one another.

12. (currently amended) The system according to claim 1, wherein the at least two paths of ~~a~~ the respective device exhibit different geometric lengths.

13. (currently amended) The system according to claim 1, wherein, in order to prevent a change in the phase displacement between the emission parts detected by the evaluation means due to a rotational movement of ~~a~~ each respective device, each of the at least two paths of the respective device exhibits, outside an imaginary straight line, path parts of essentially equal size on opposite sides of this straight line.

14. (currently amended) The system according to claim 1, further comprising detection means designed for the detection of a rotational movement of ~~a~~ each respective device, wherein the evaluation means are designed for the compensation of a change incurred by a rotational movement on the at least two paths of the respective device in the phase displacement between detected emission parts on the basis of information from the detection means.

15. (previously presented) The system according to claim 1, wherein the at least two paths of the respective device are designed in such a way that they exhibit at least one common path section, which is run through in opposite directions by the emission parts fed into the at least two paths .

16. (currently amended) The system according to claim 15, wherein the common path section is designed in such a way that it exhibits a path part which is run through by one of the emission parts essentially in the direction of measurement of ~~the~~ each respective device and a path part which is run through by this emission part essentially in the opposite direction, wherein the two path parts, with the respective device at rest, exhibit a different physical length.

17. (previously presented) The system according to claim 1, further comprising an acceleration sensor designed for creating a reference to the local gravity normal.

18. (previously presented) The system according to claim 1, wherein the at least six devices are arranged on the six faces of a cube, wherein the devices exhibit on adjacent faces measurement axes aligned at right angles to one another, and wherein the devices exhibit on mutually opposing faces measurement axes aligned opposite to one another.